

Figure 1

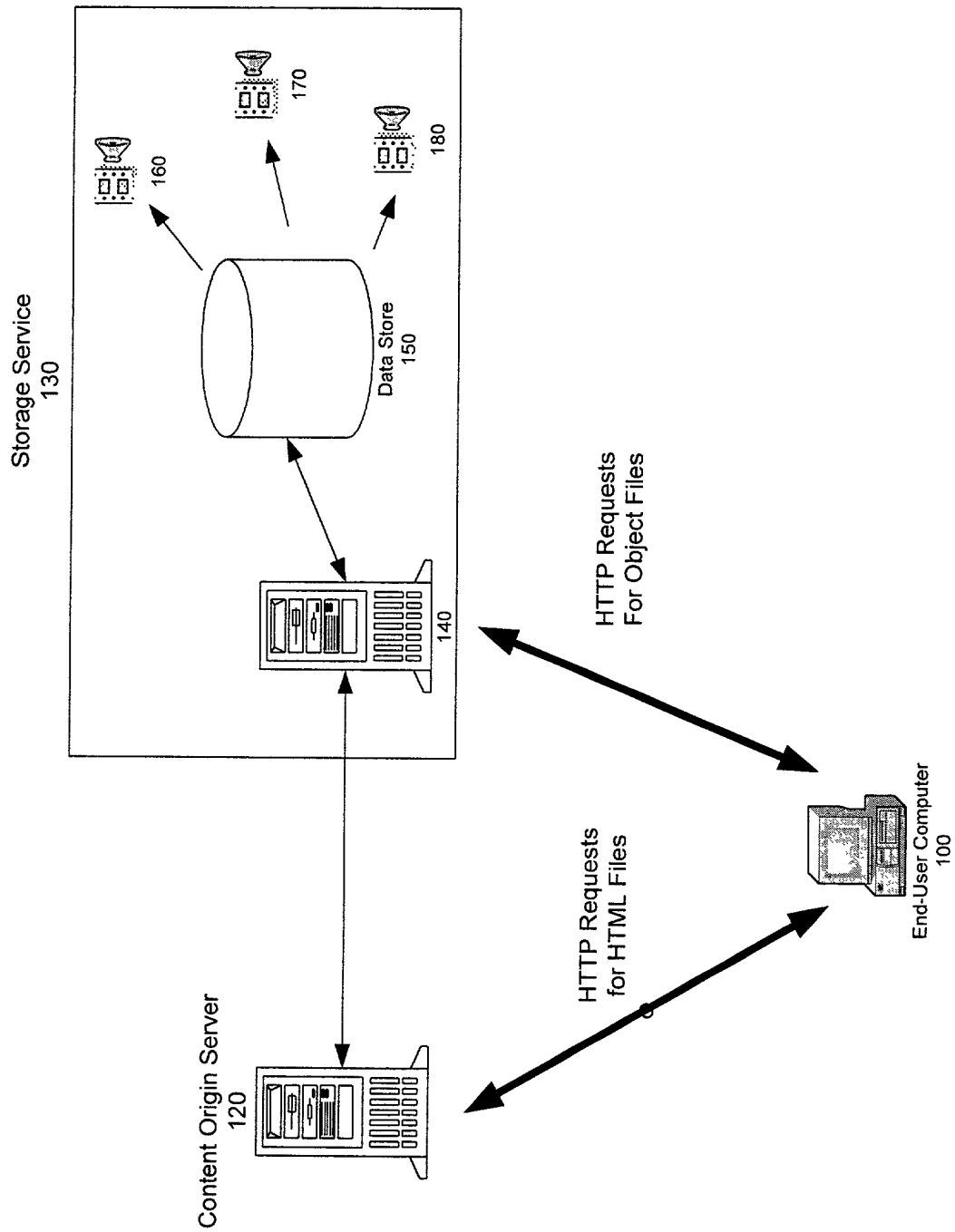


Figure 2

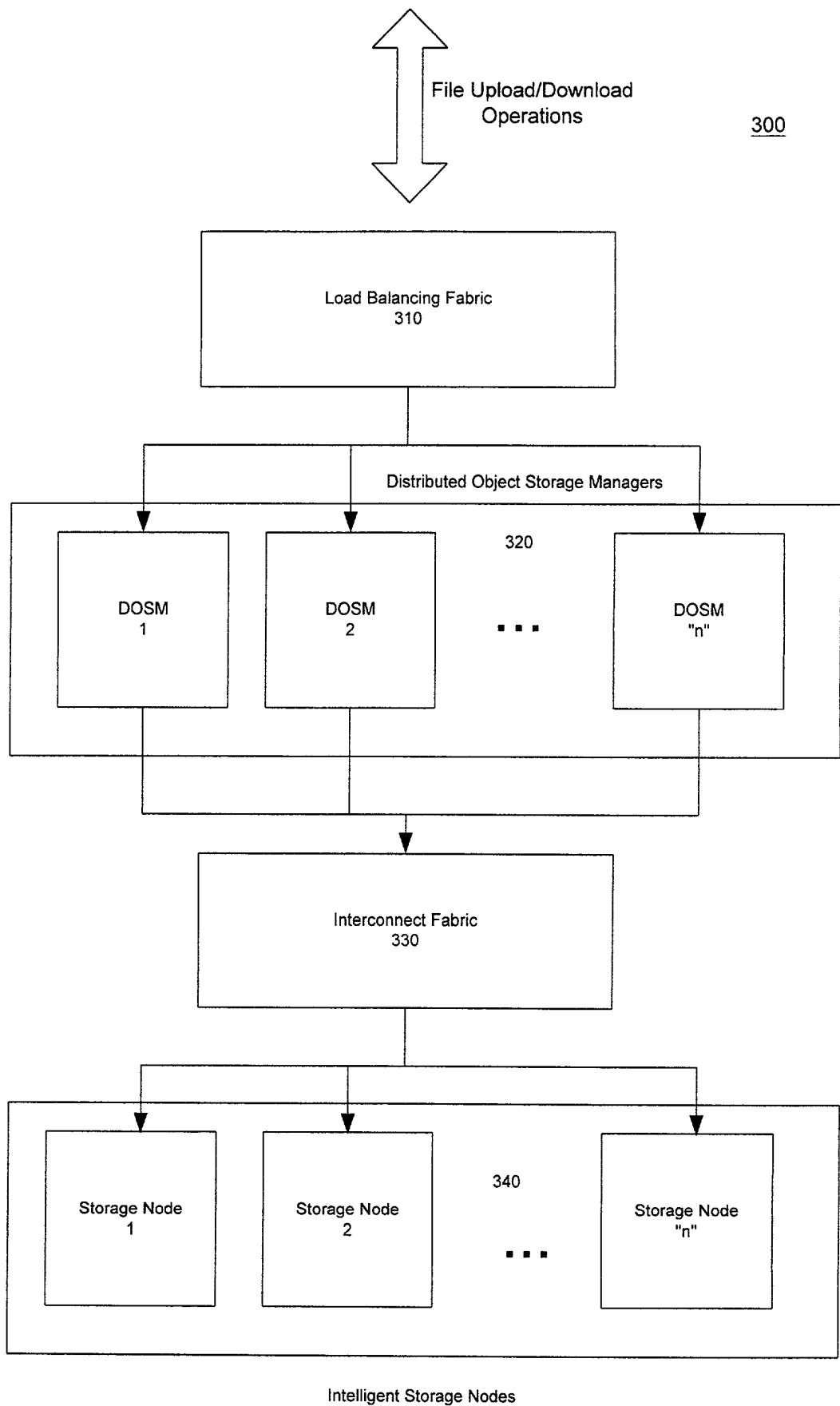


Figure 3

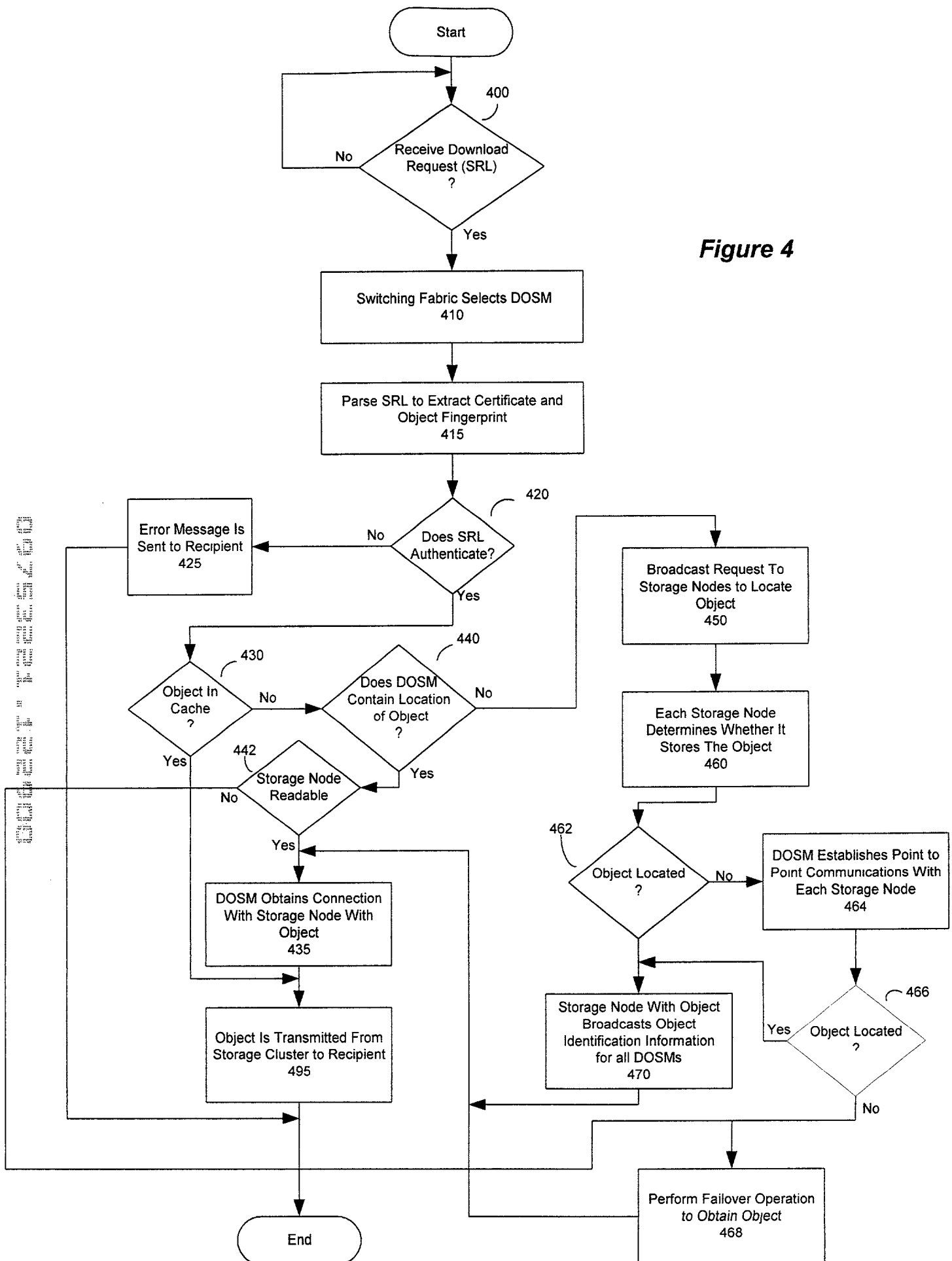


Figure 4

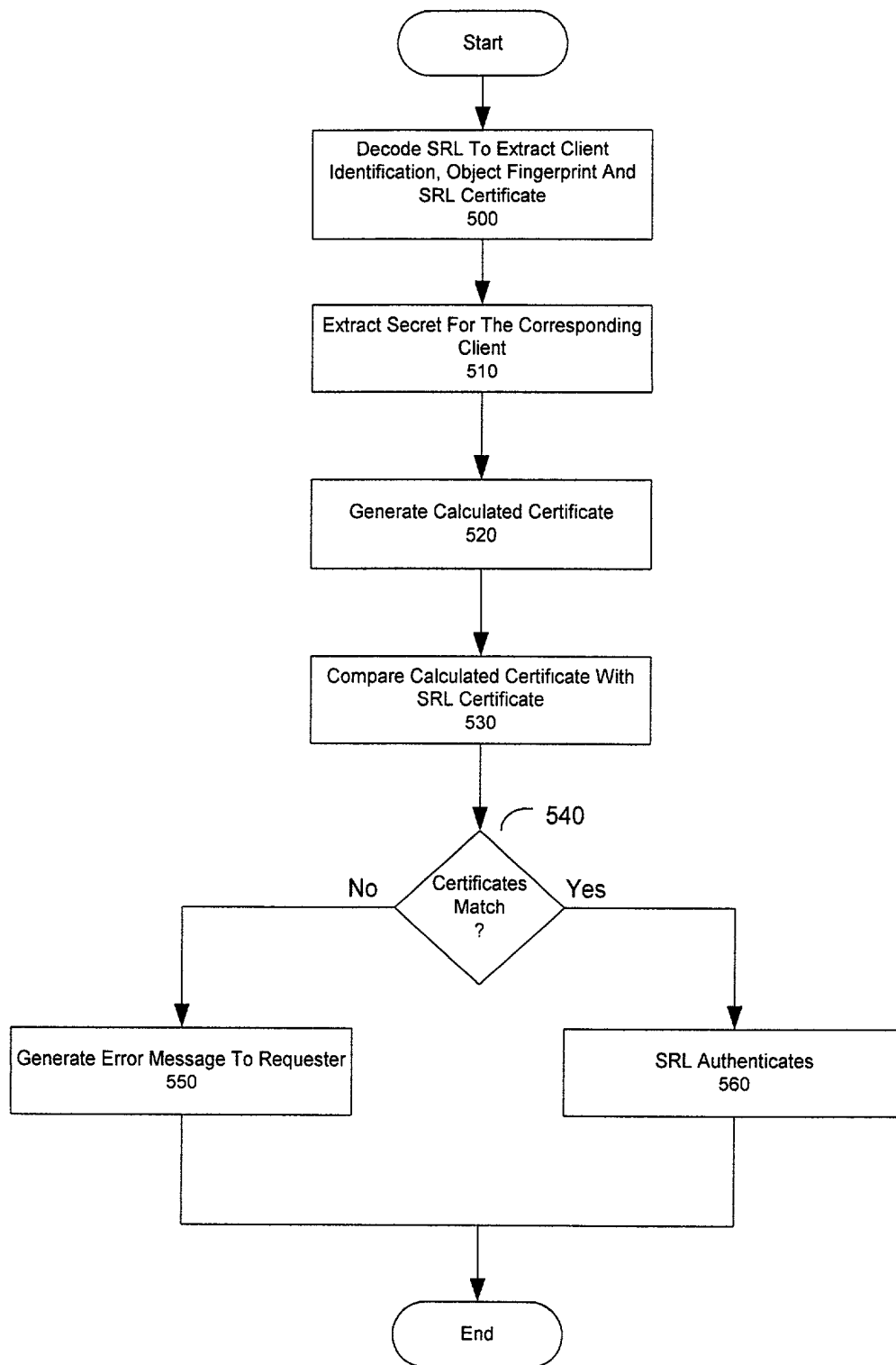
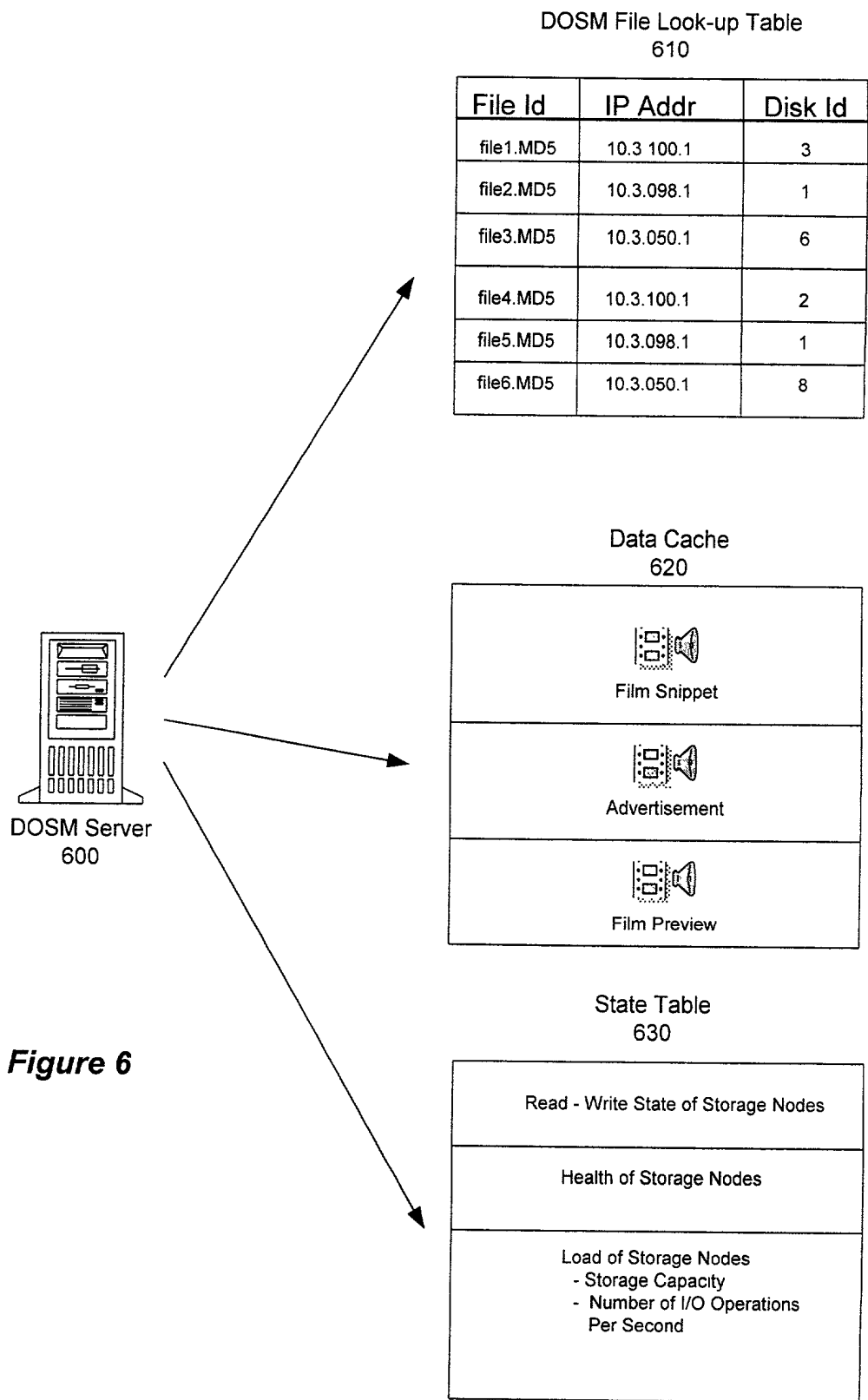


Figure 5

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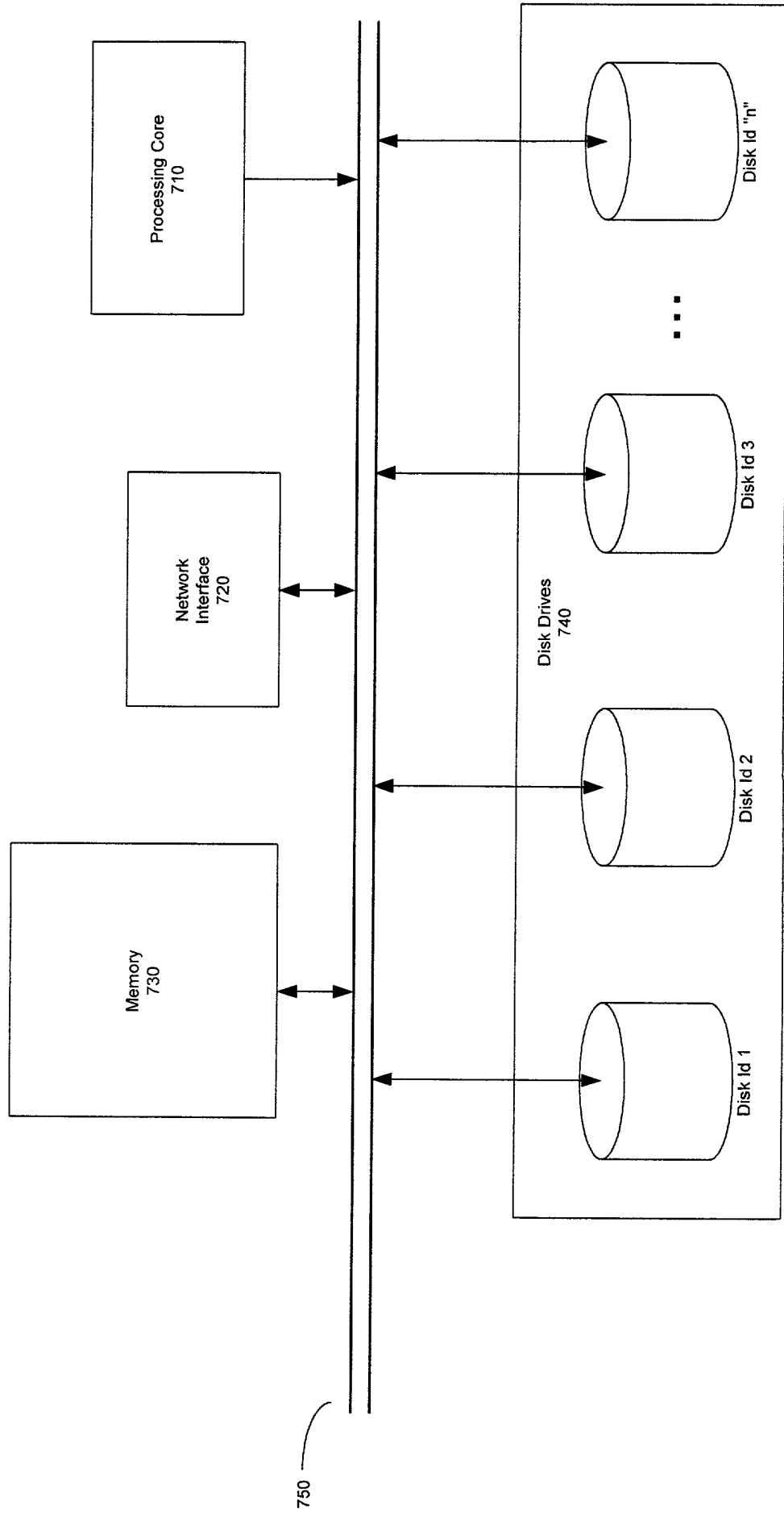


Figure 7

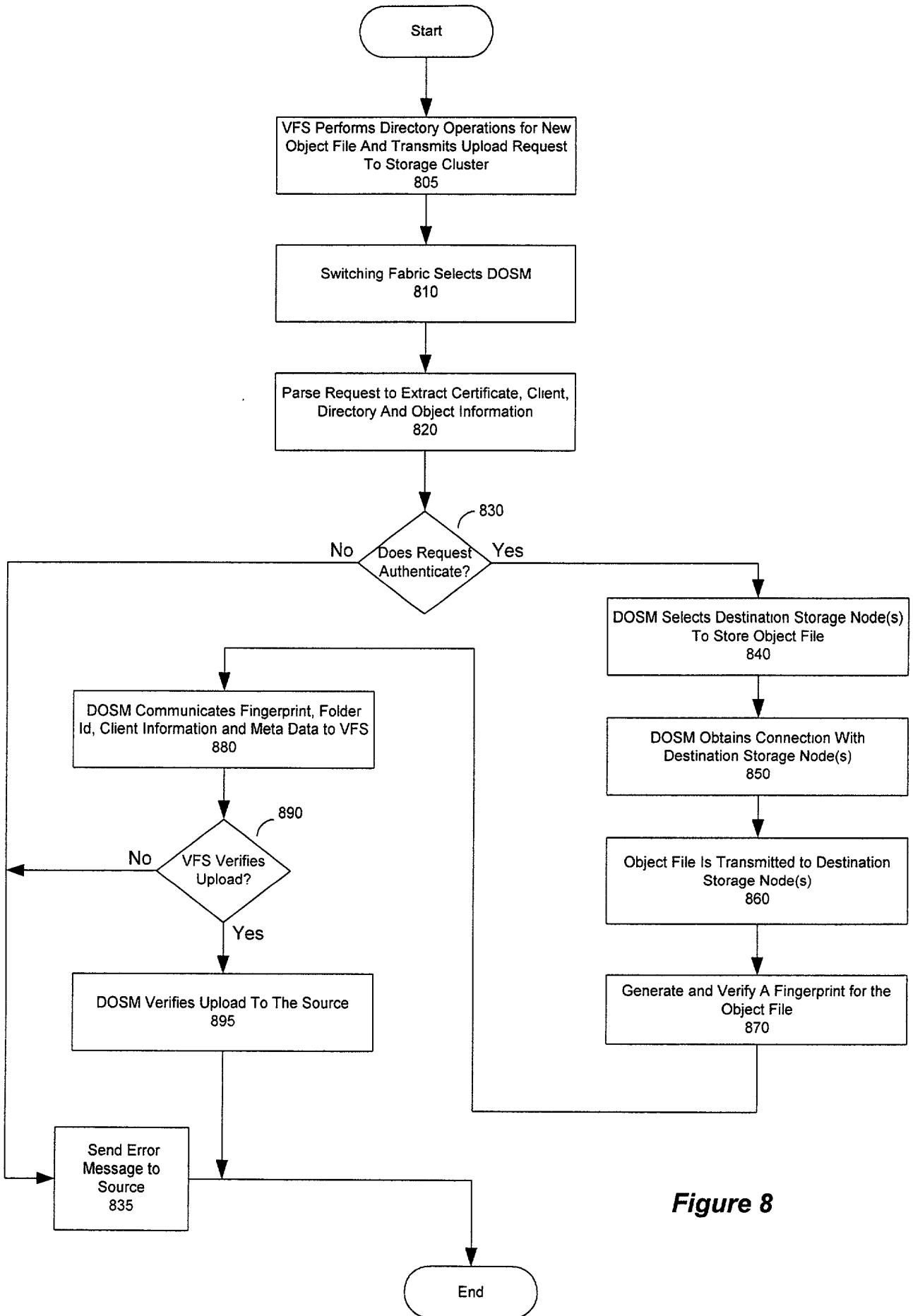


Figure 8

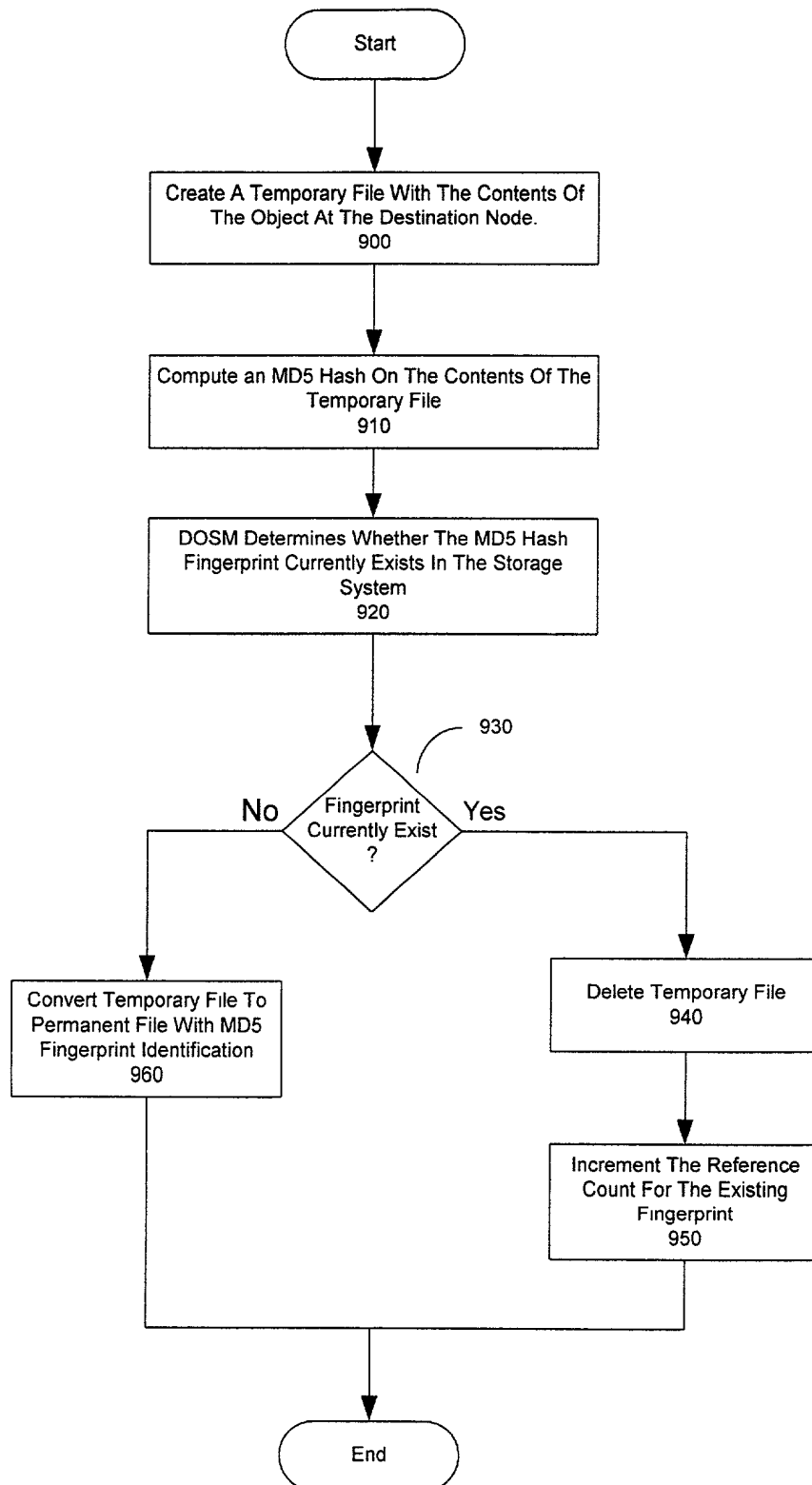


Figure 9

FIG. 10 is a block diagram of a system architecture for file upload/download operations. The system includes a Load Balancing Fabric 310, which is connected to four Data Object Storage Modules (DOSM) labeled DOSM 1, DOSM 2, DOSM 3, and DOSM "n". Each DOSM contains a Data Cache and a list of data objects. The Load Balancing Fabric 310 is also connected to File Upload/Download Operations, which are represented by a double-headed arrow.

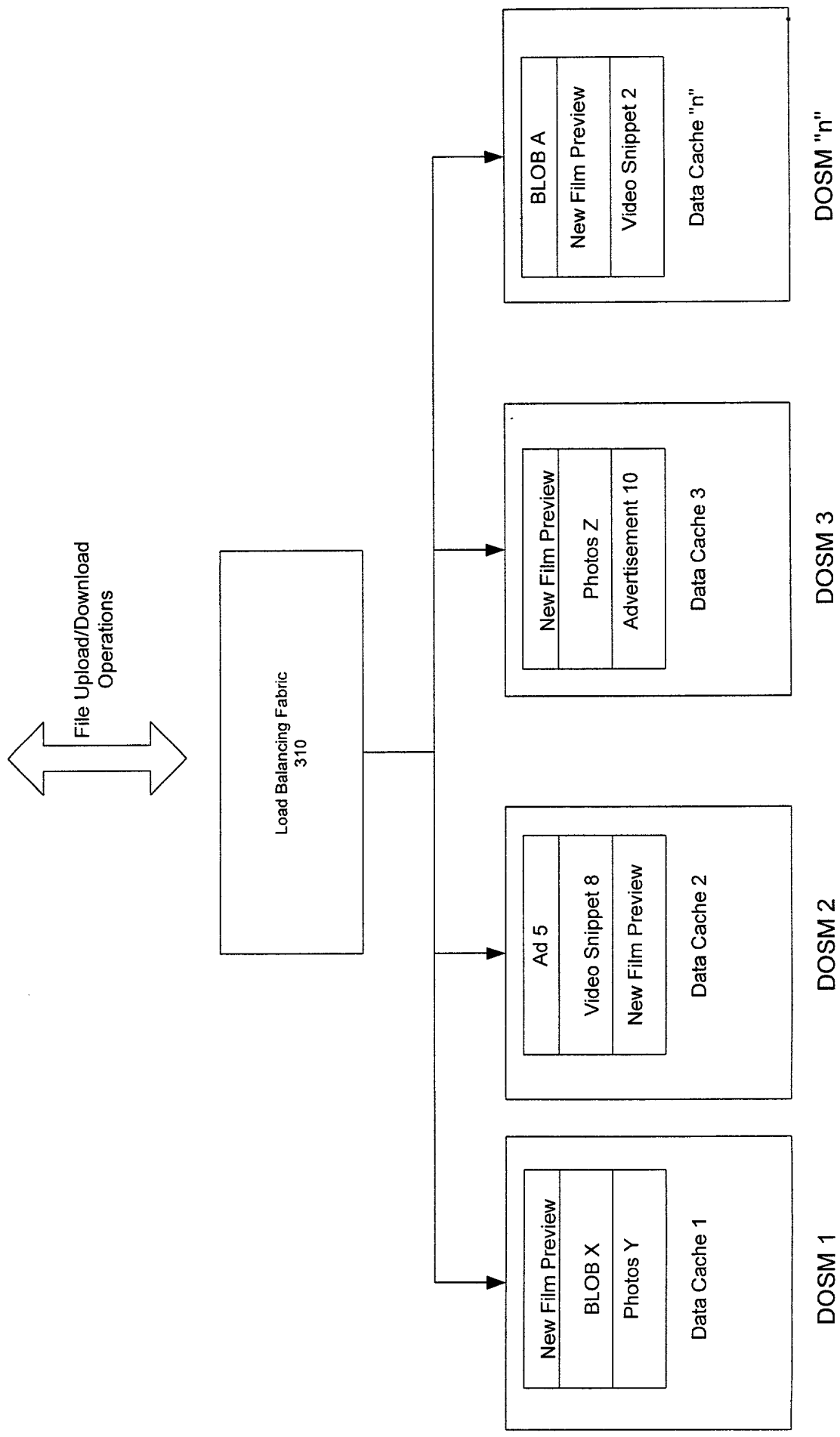


Figure 10

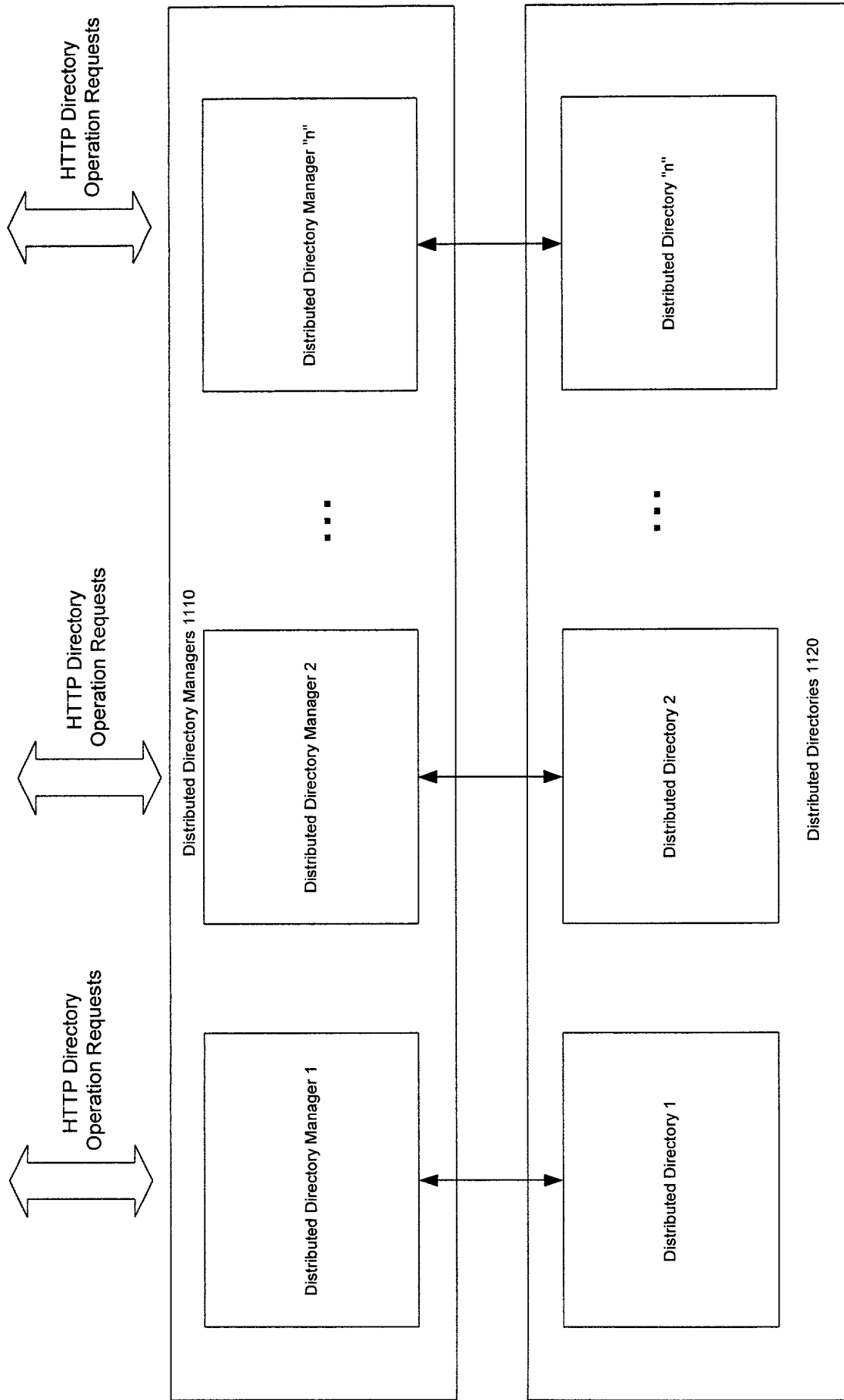


Figure 11

Customer Table

	Customer Name	Customer Reserved Fields
	Customer A	[Customer stores data ...]
	Customer B	[Customer stores data ...]
	Customer C	[Customer stores data ...]
	Customer D	[Customer stores data ...]

1200

Folder Table

Customer Id	Folder Id	Folder Parent Id	Metadata
3	2	-	[Reserved]
3	100	2	[Reserved]
3	251	2	[Reserved]
3	166	251	[Reserved]

1210

File Table

Customer Id	File Handle	Folder Id	Folder Parent Id	Metadata
3	52.MD5	100	2	[Reserved]
3	55.MD5	100	2	[Reserved]
3	99.MD5	166	251	[Reserved]
3	67.MD5	166	251	[Reserved]

1220

Figure 12

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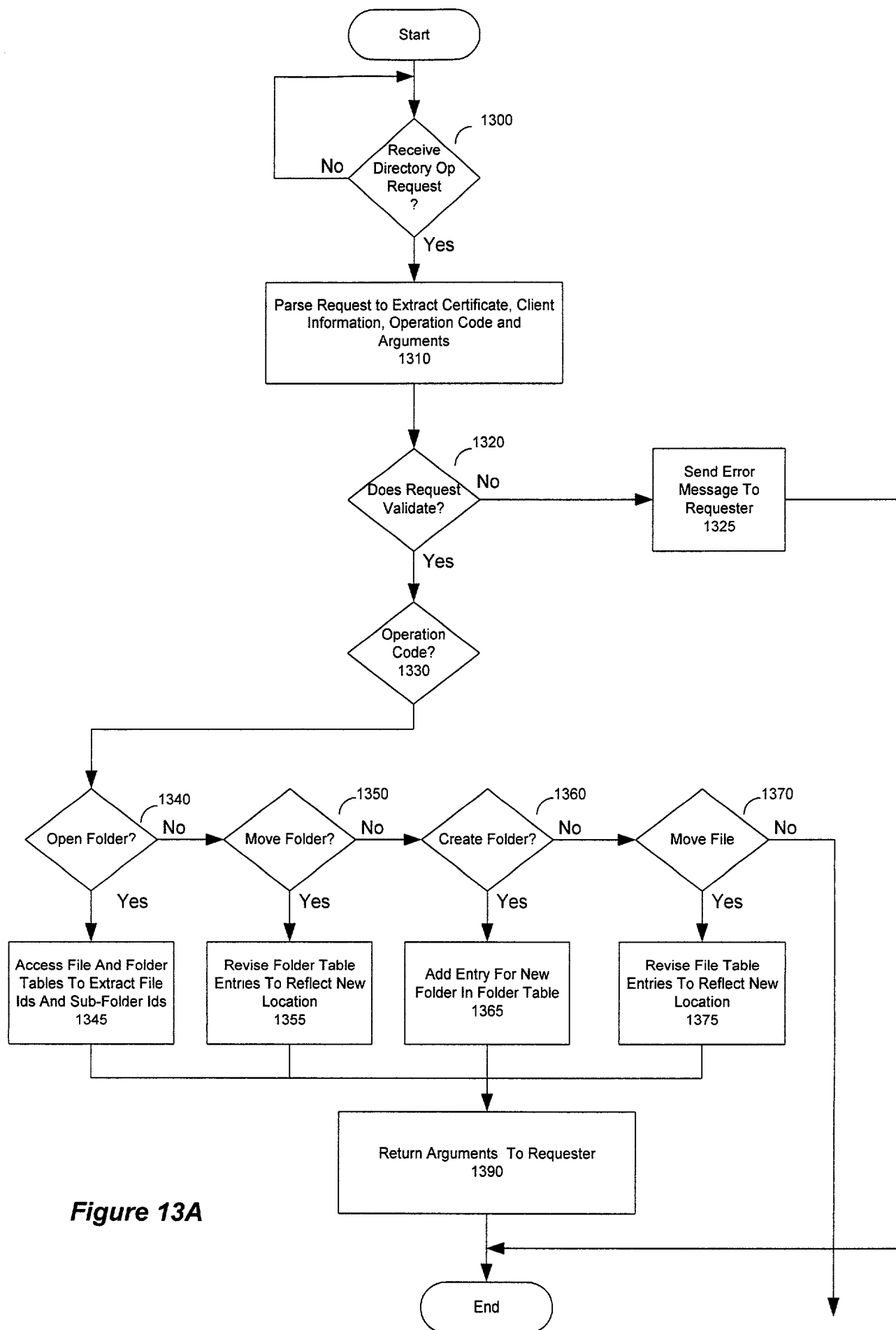


Figure 13A

(To Figure 13B)

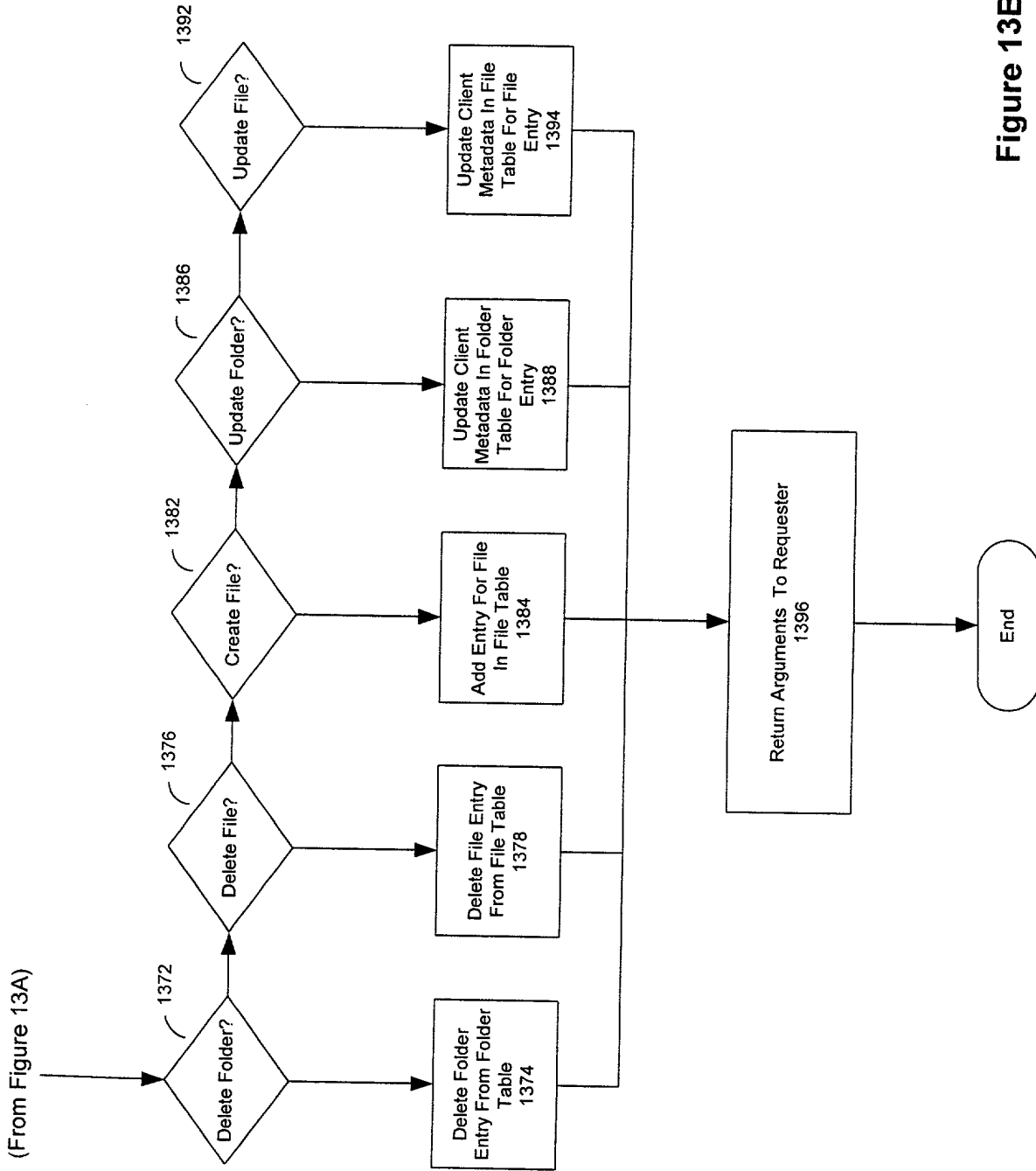


Figure 13B

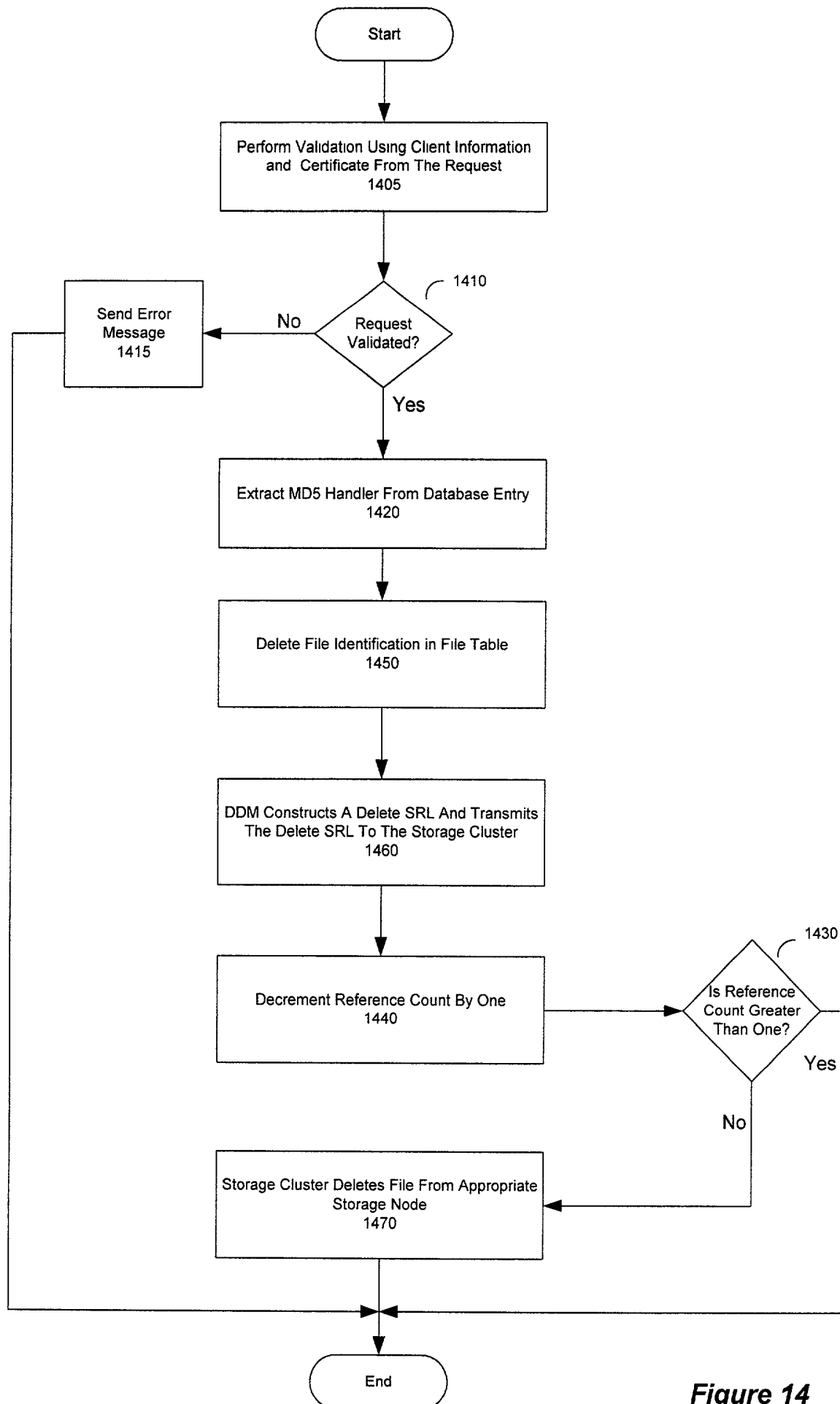


Figure 14

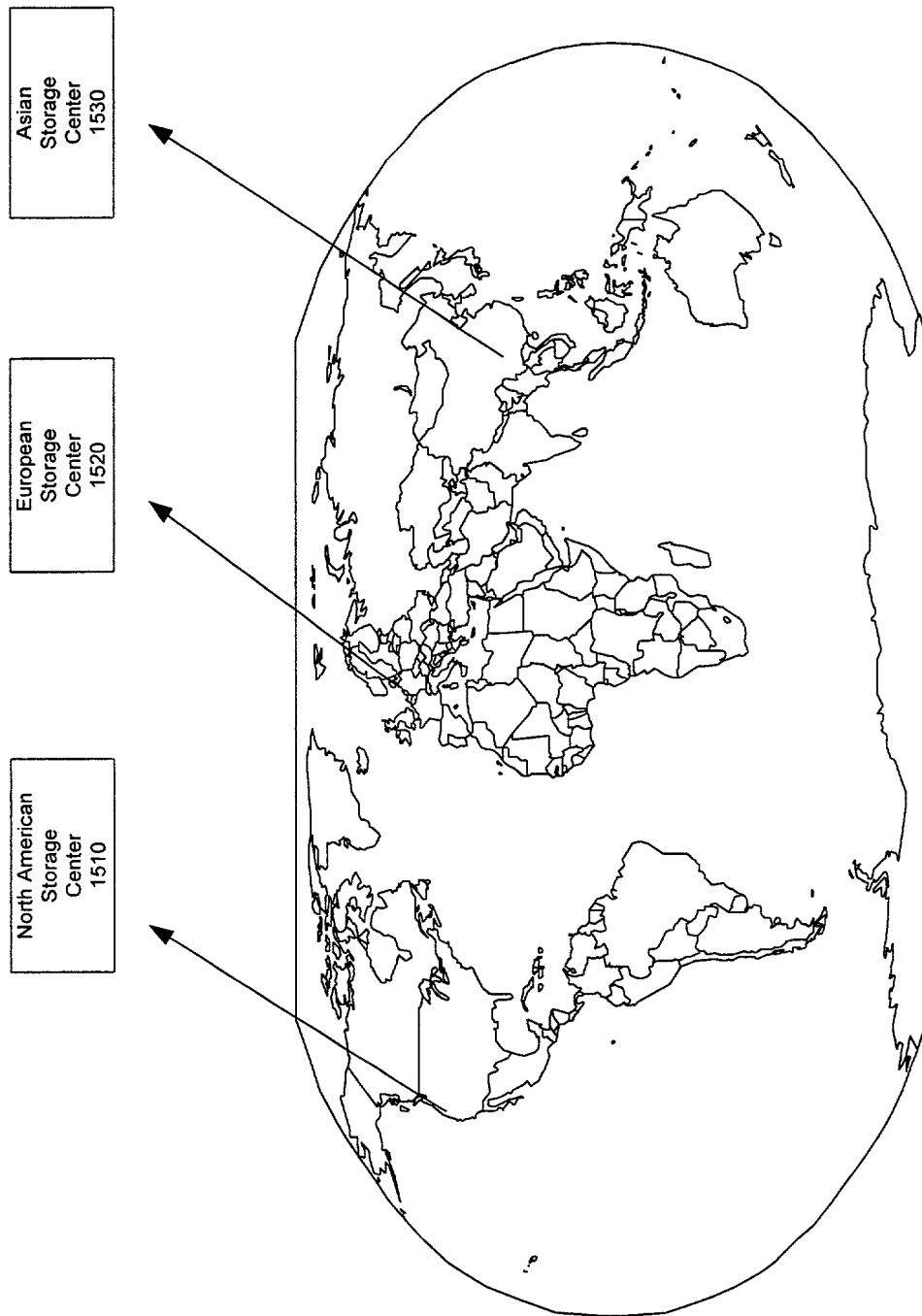


Figure 15

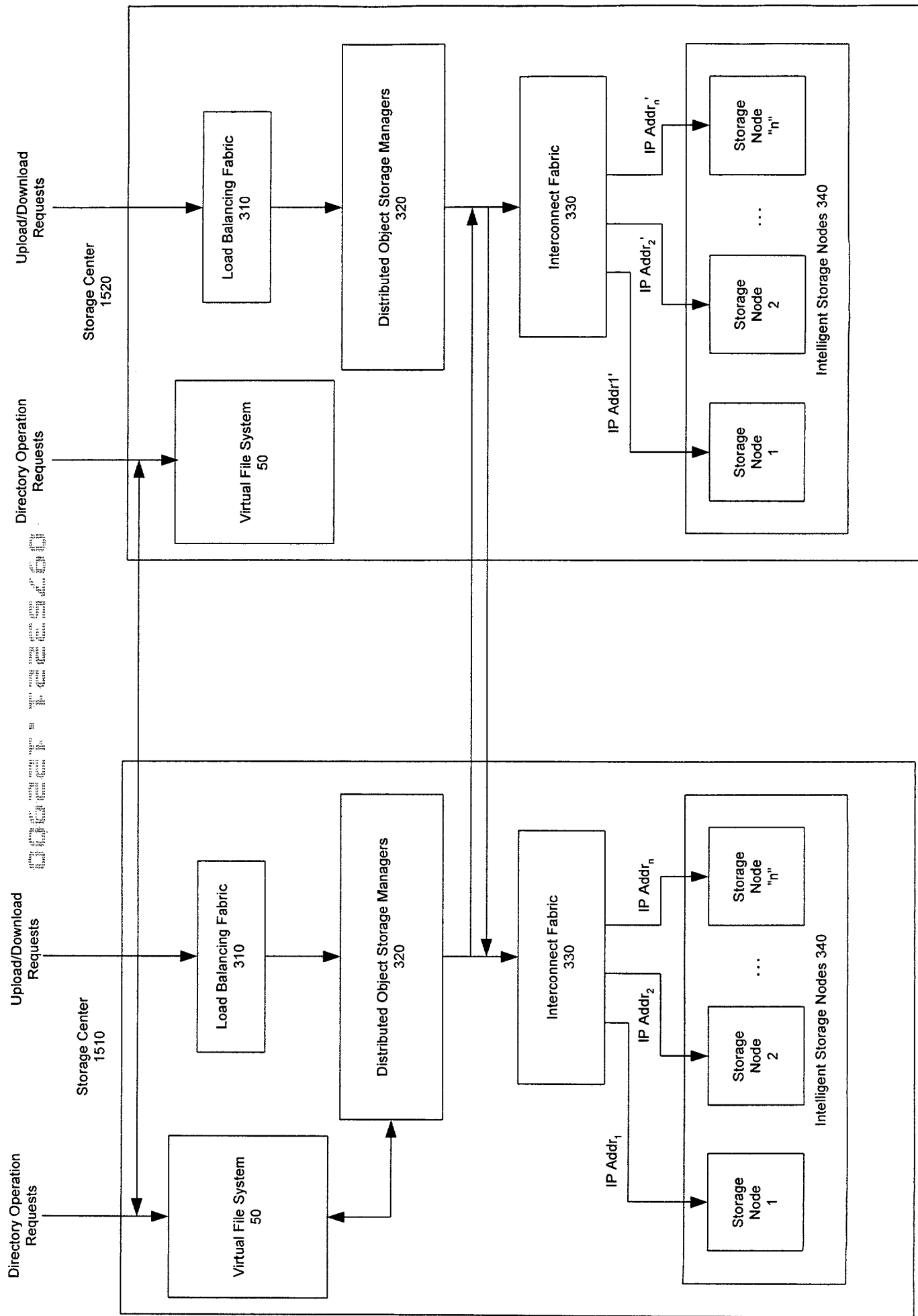
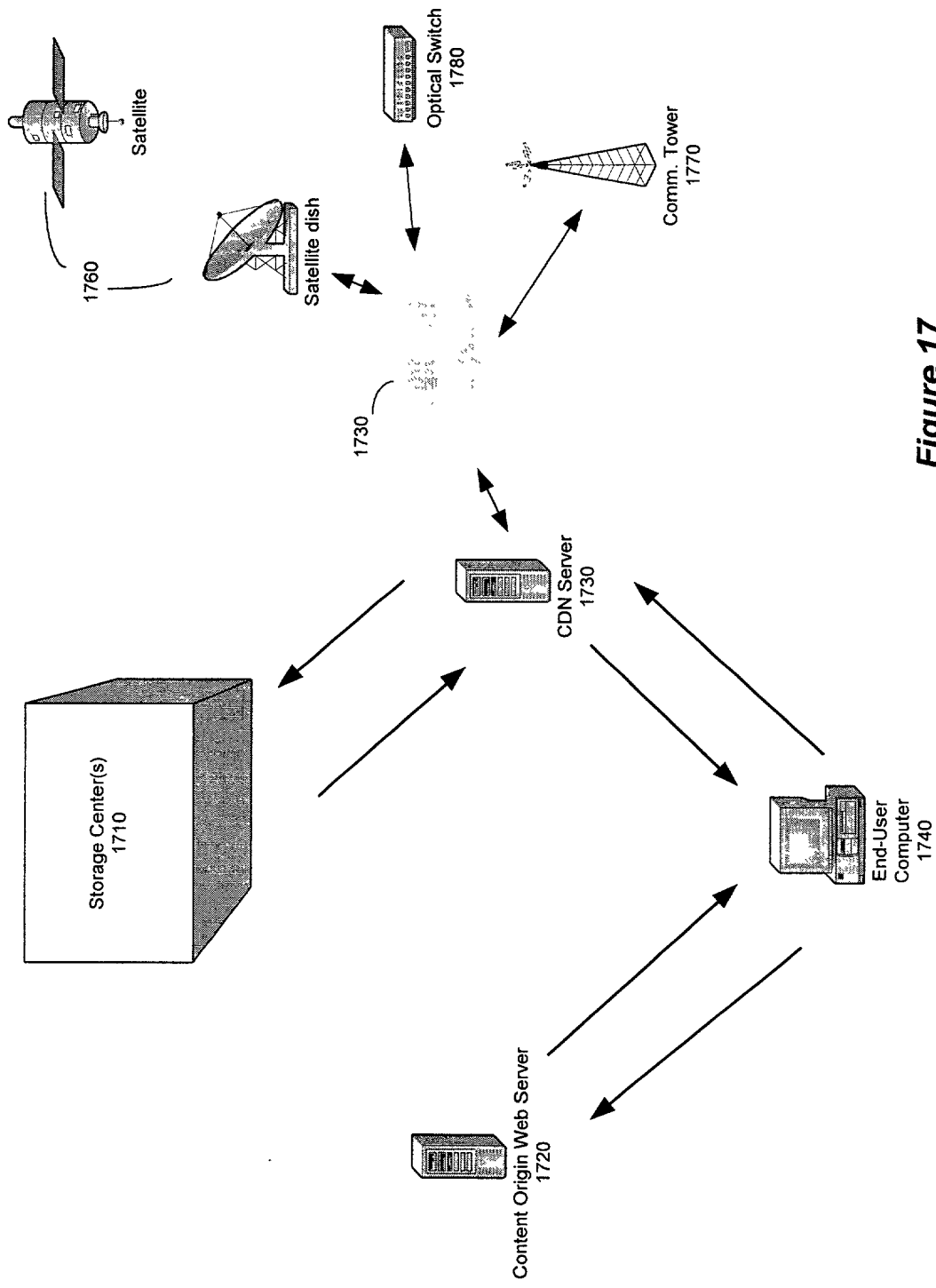


Figure 16



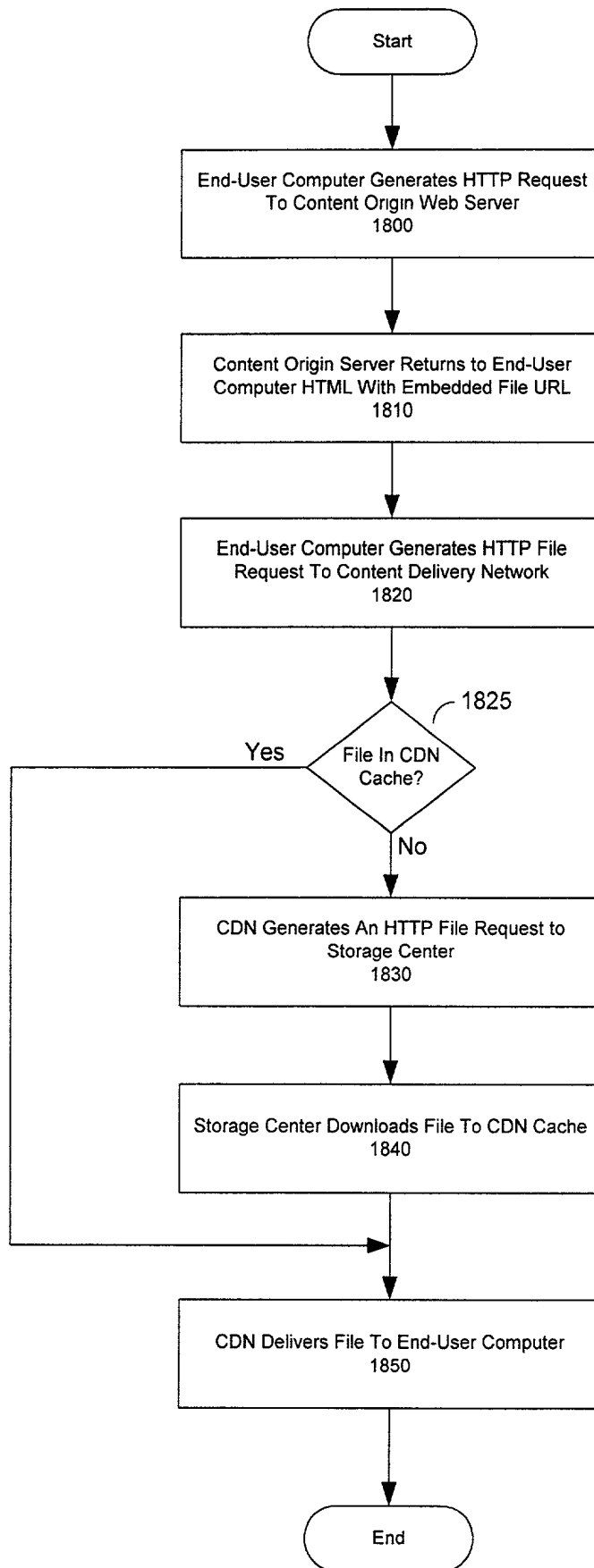


Figure 18

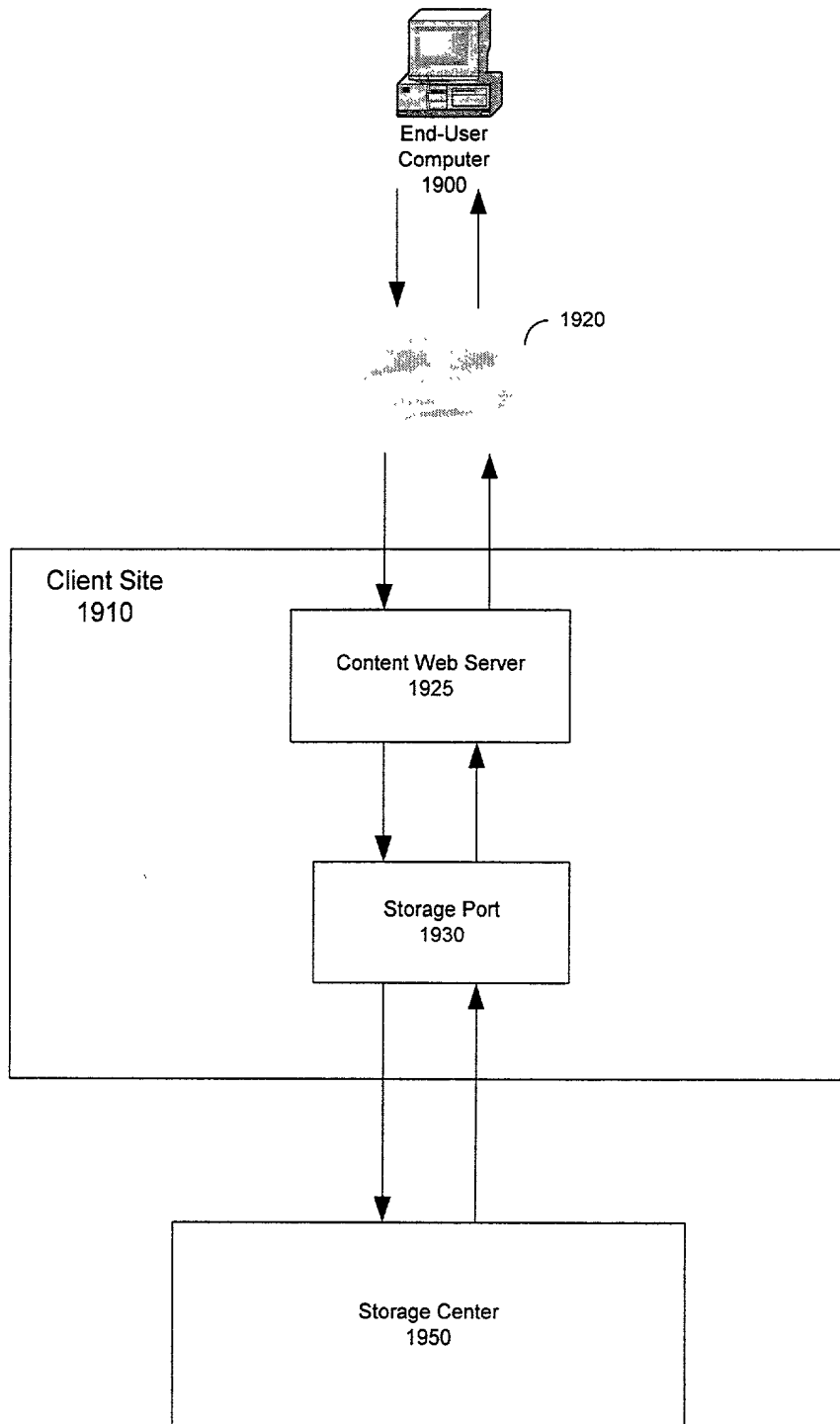


Figure 19

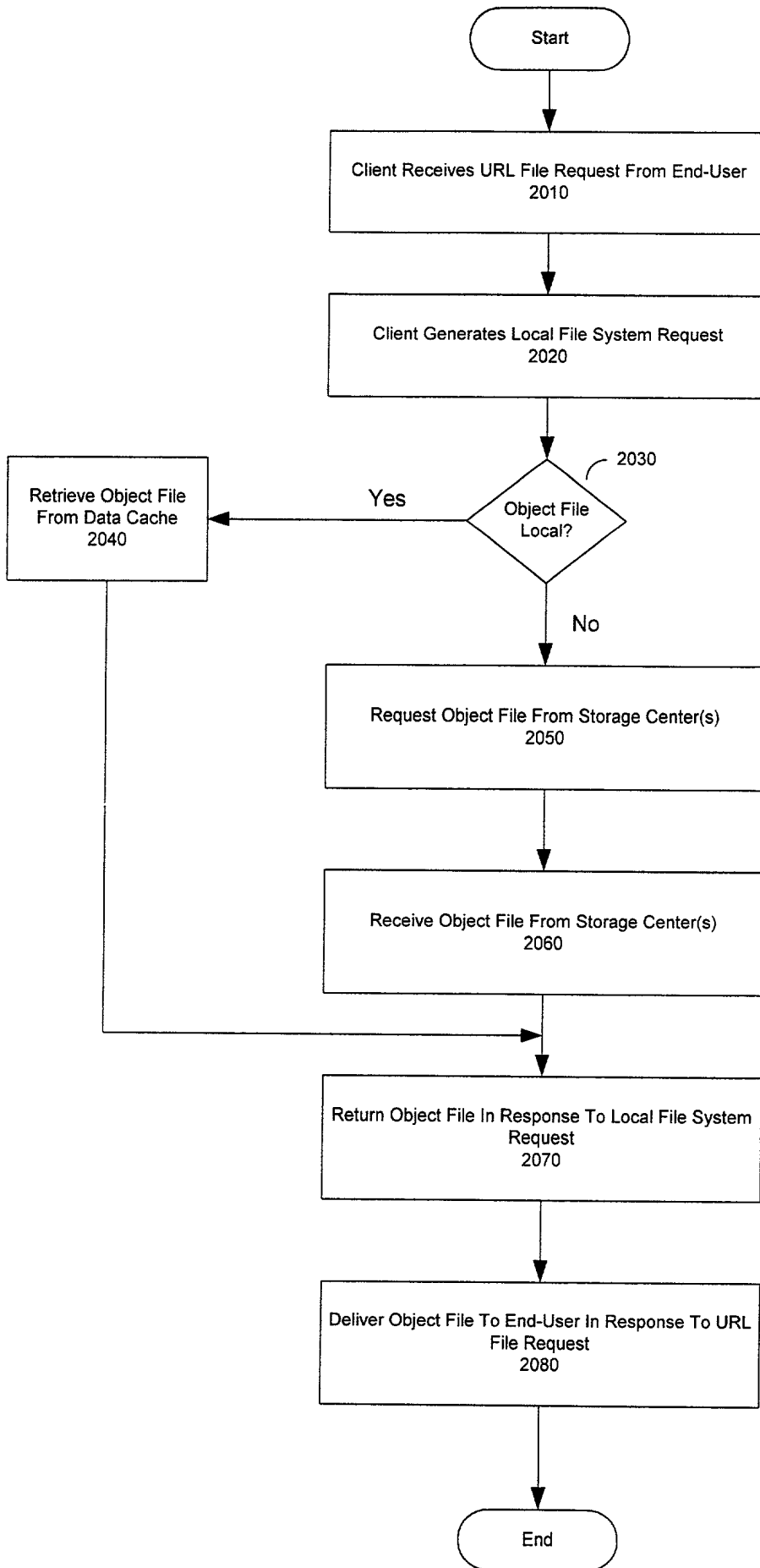


Figure 20

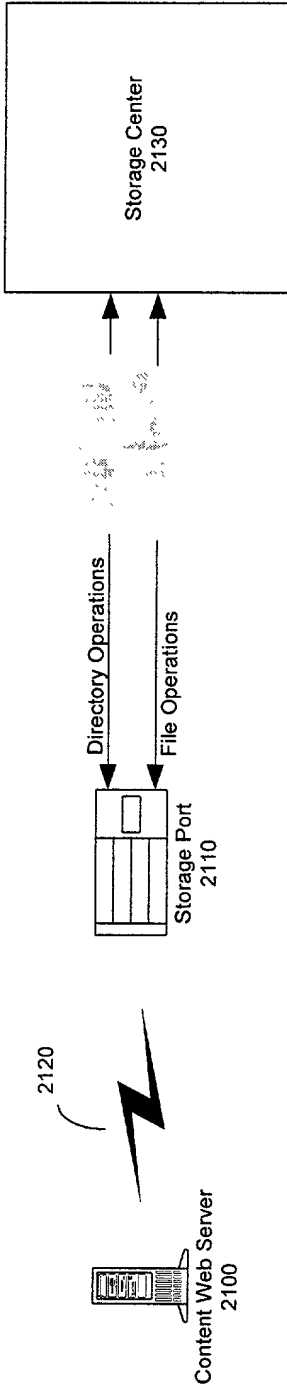


Figure 21a

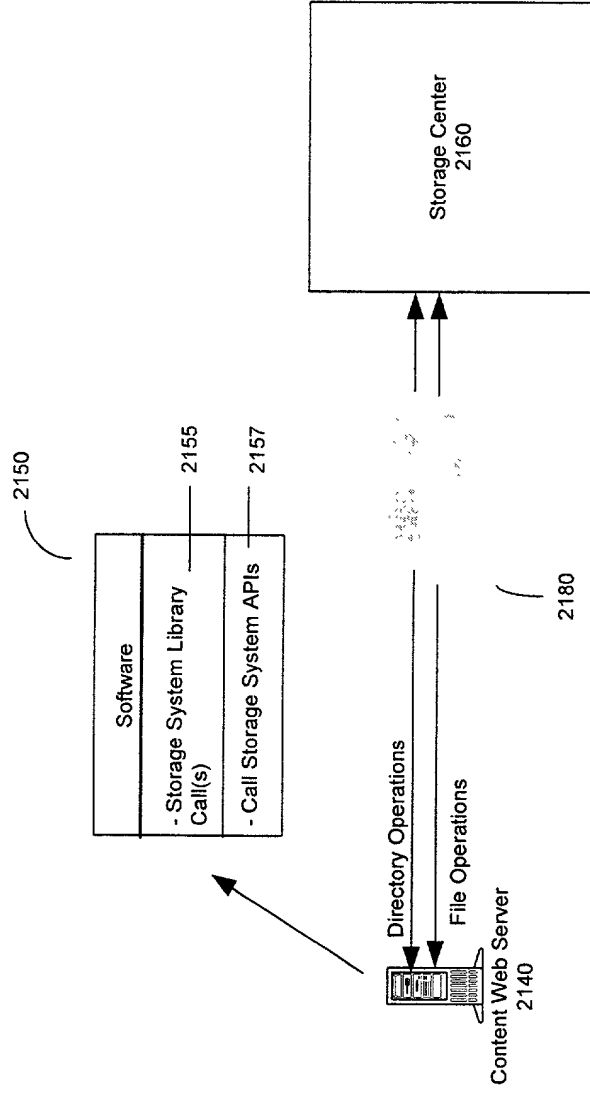


Figure 21b

Storage Port
2200

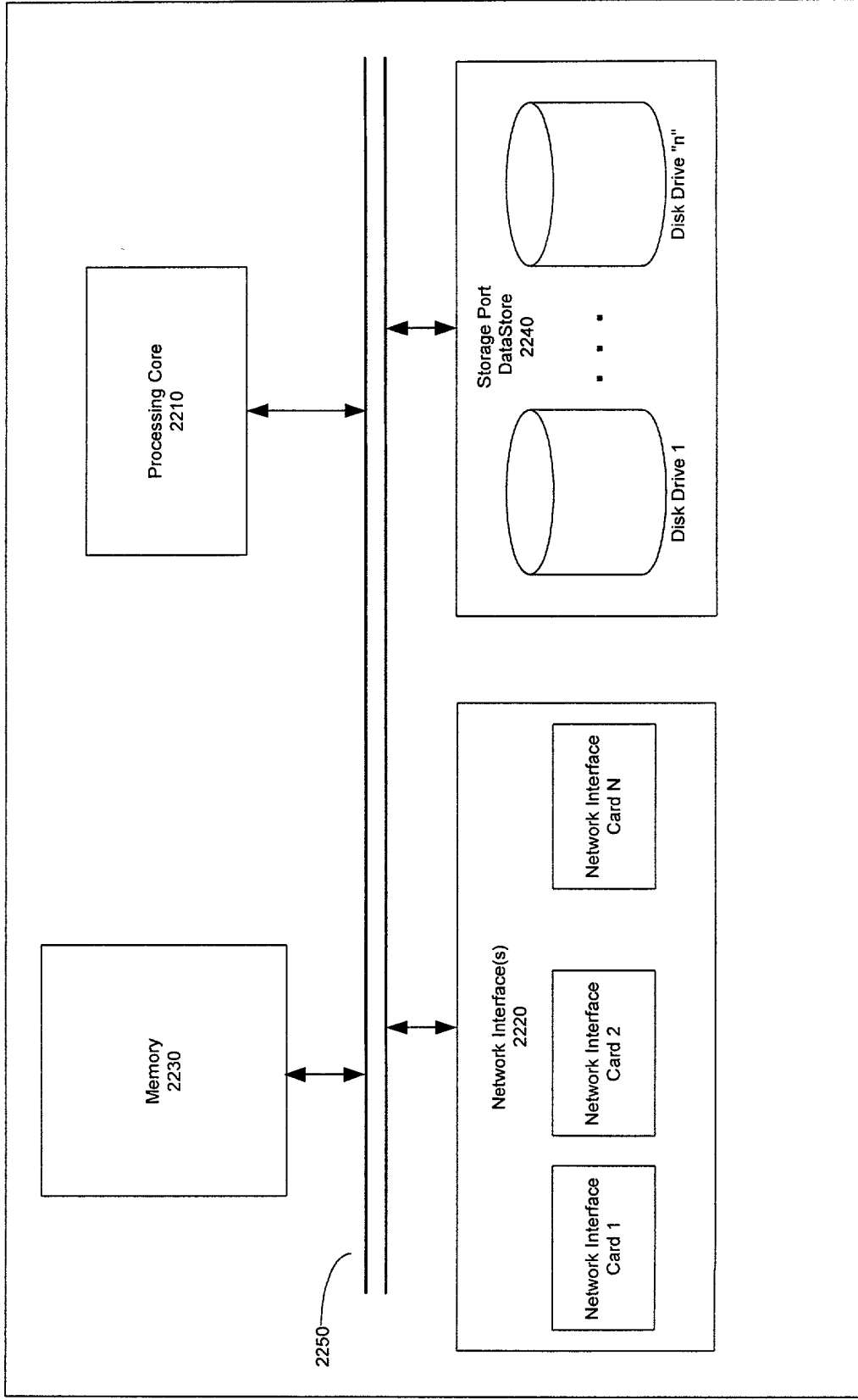


Figure 22

2300

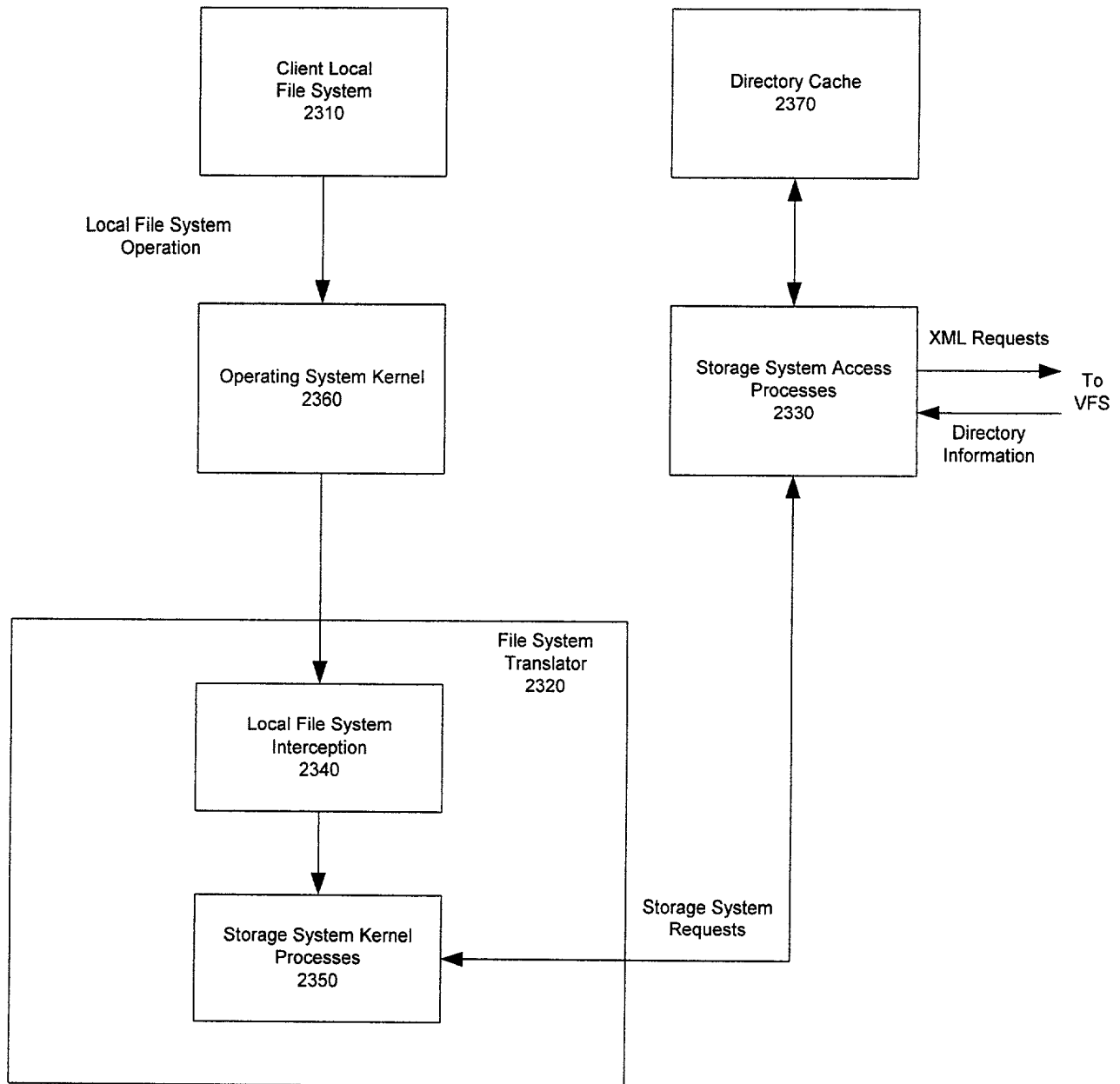


Figure 23

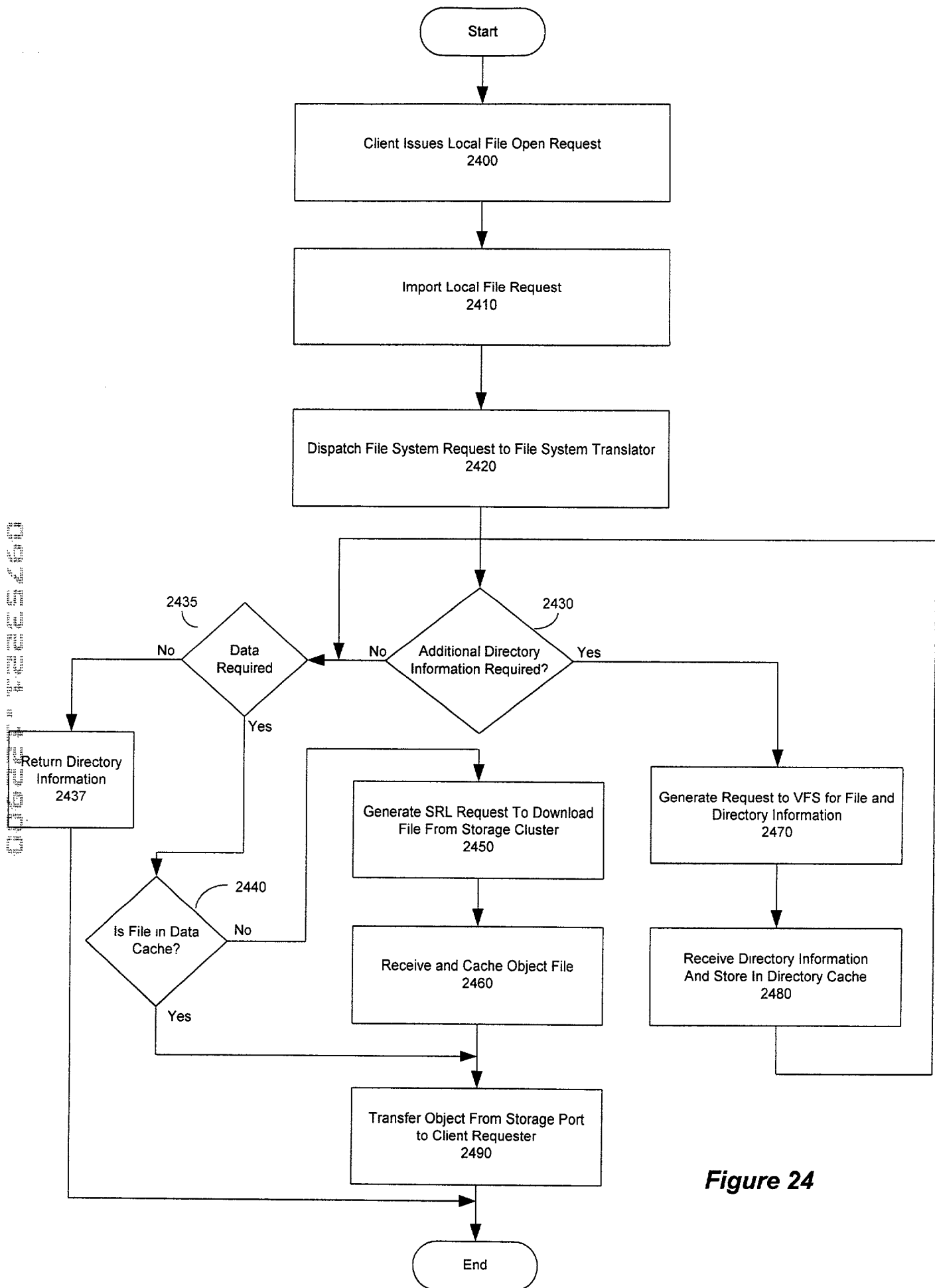


Figure 24

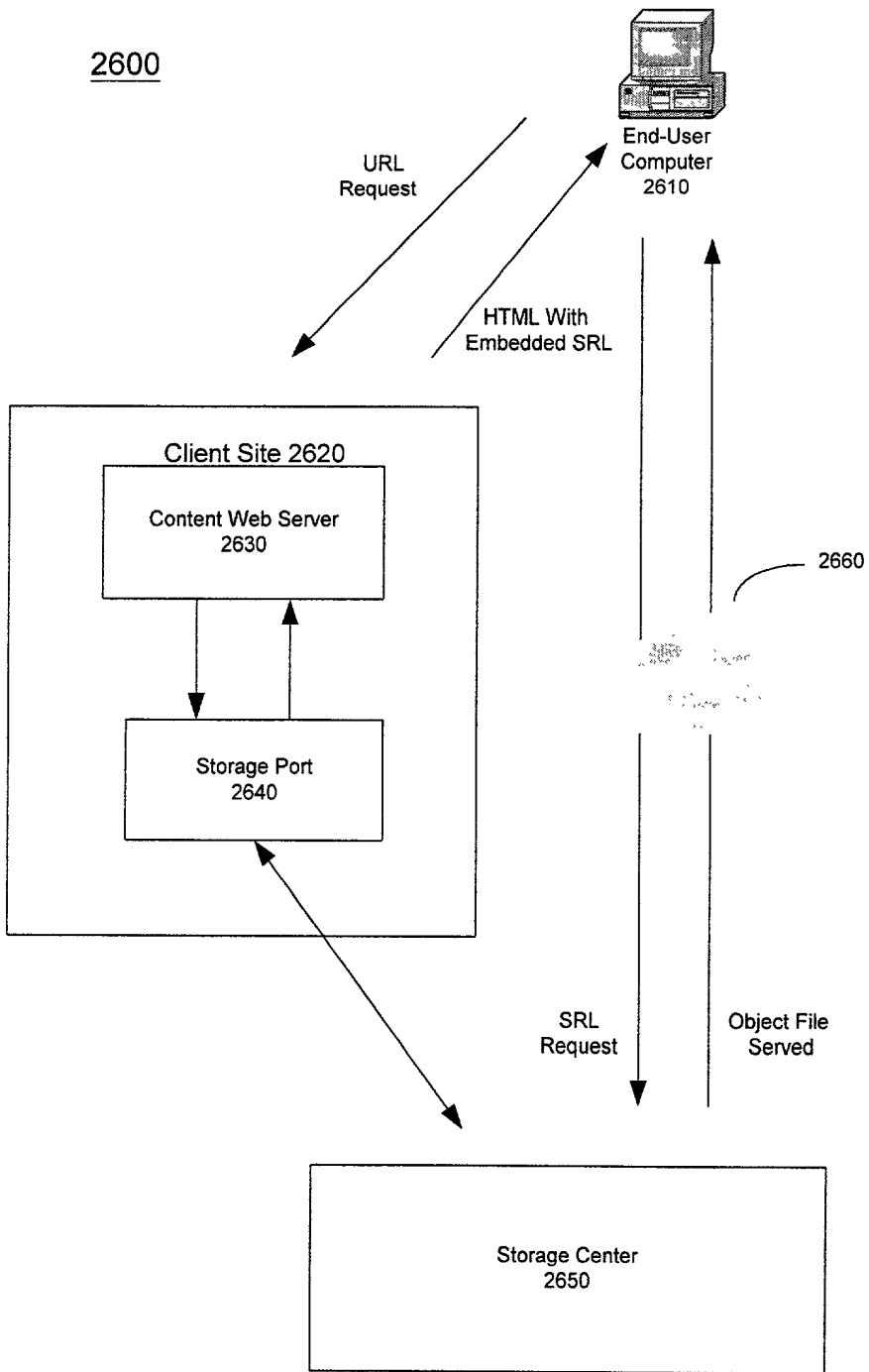


Figure 25

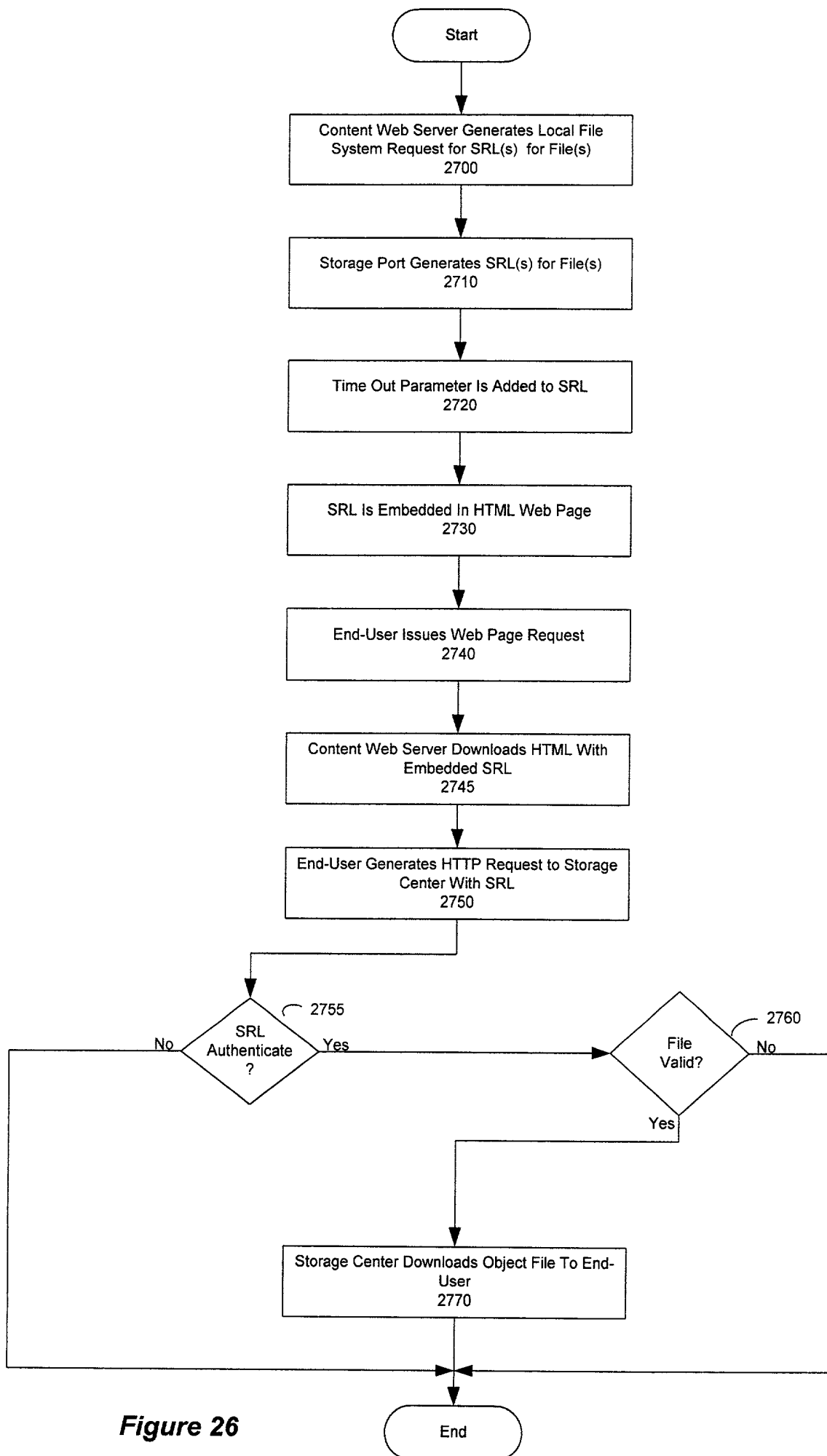


Figure 26

2800

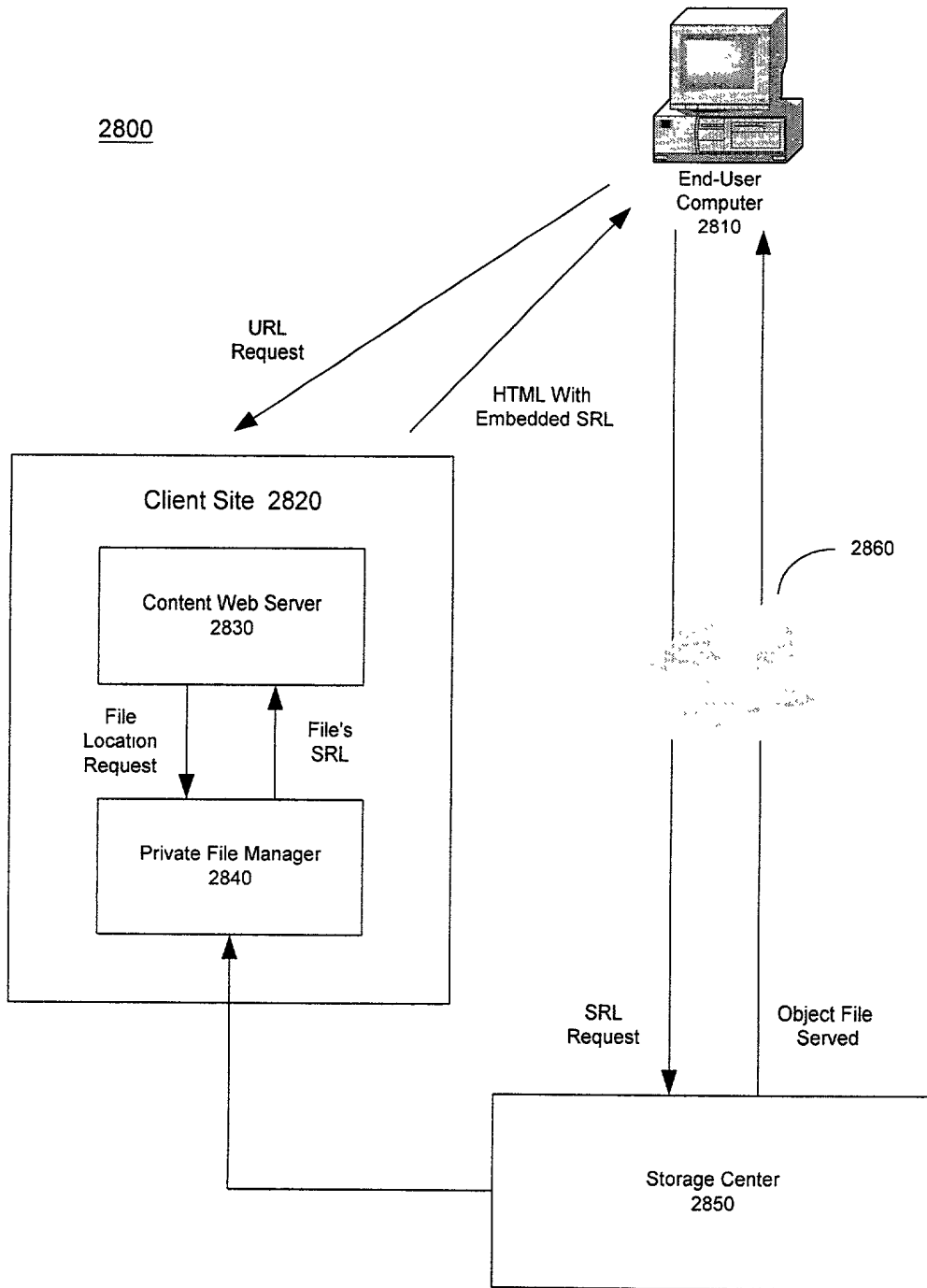


Figure 27

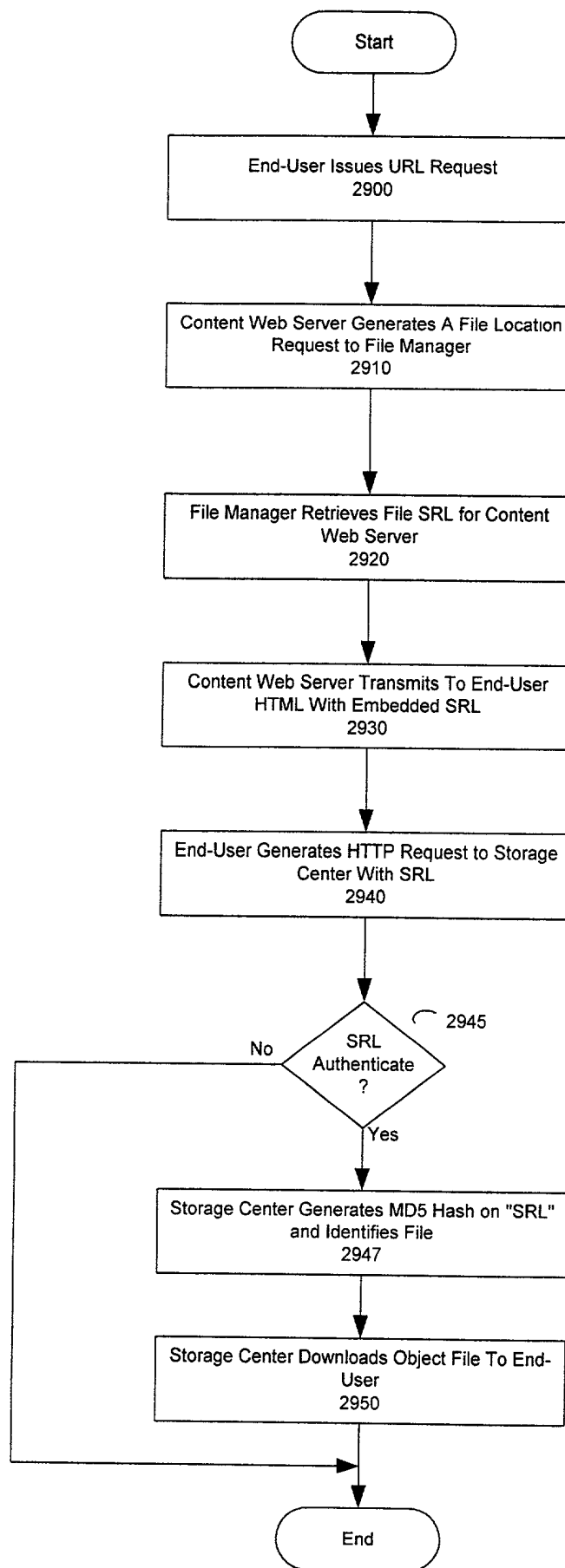


Figure 28

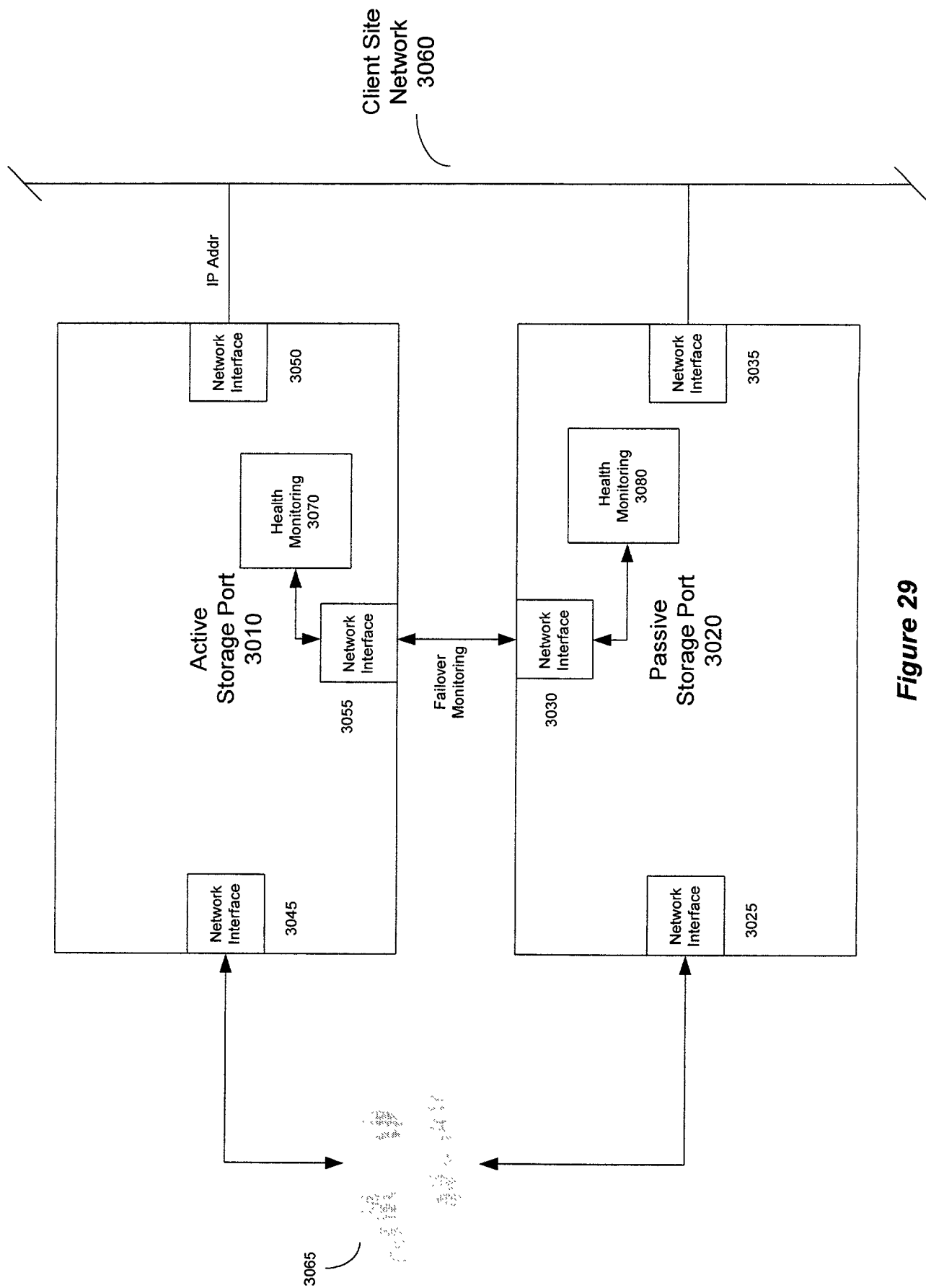


Figure 29

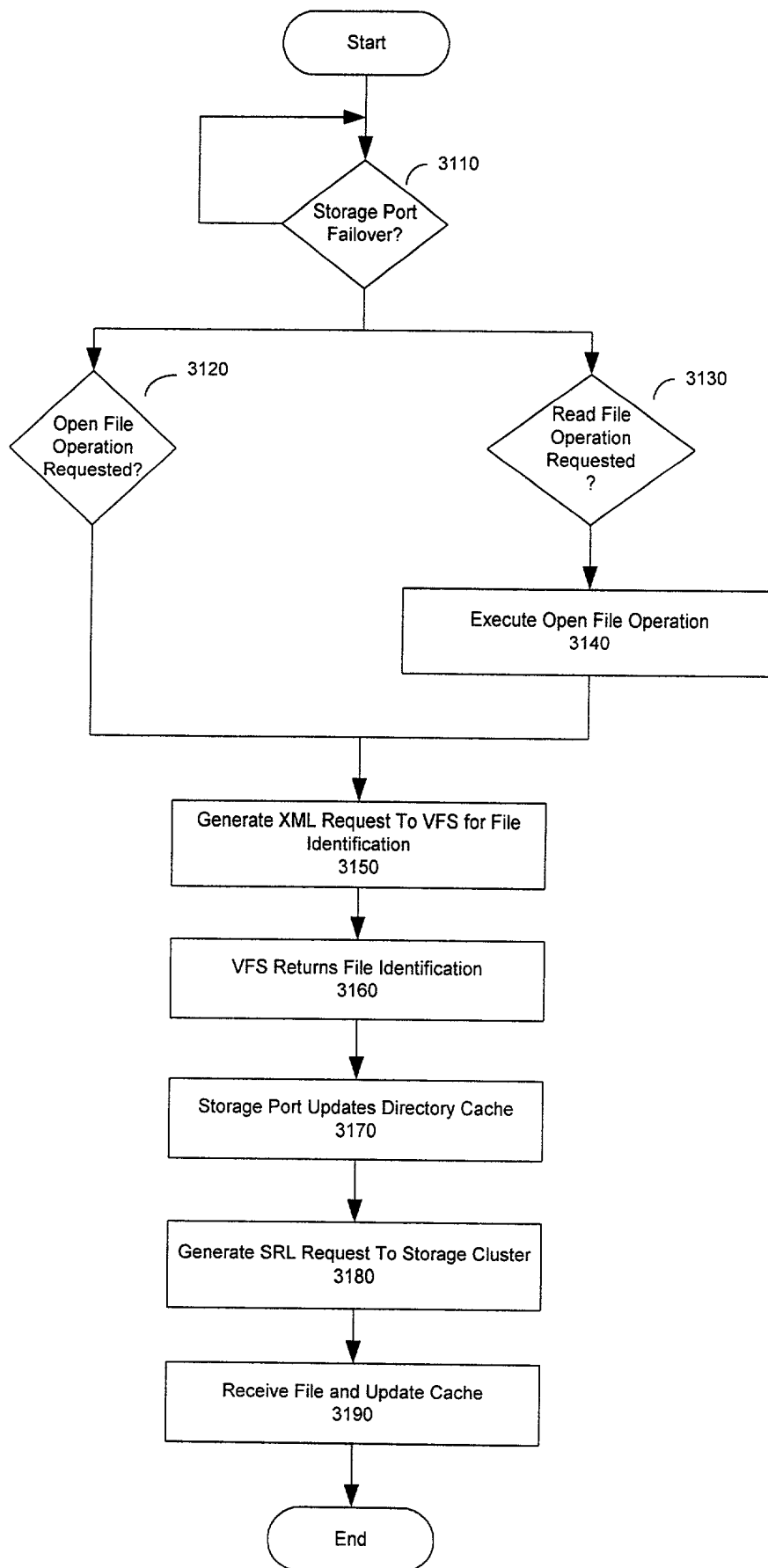


Figure 30

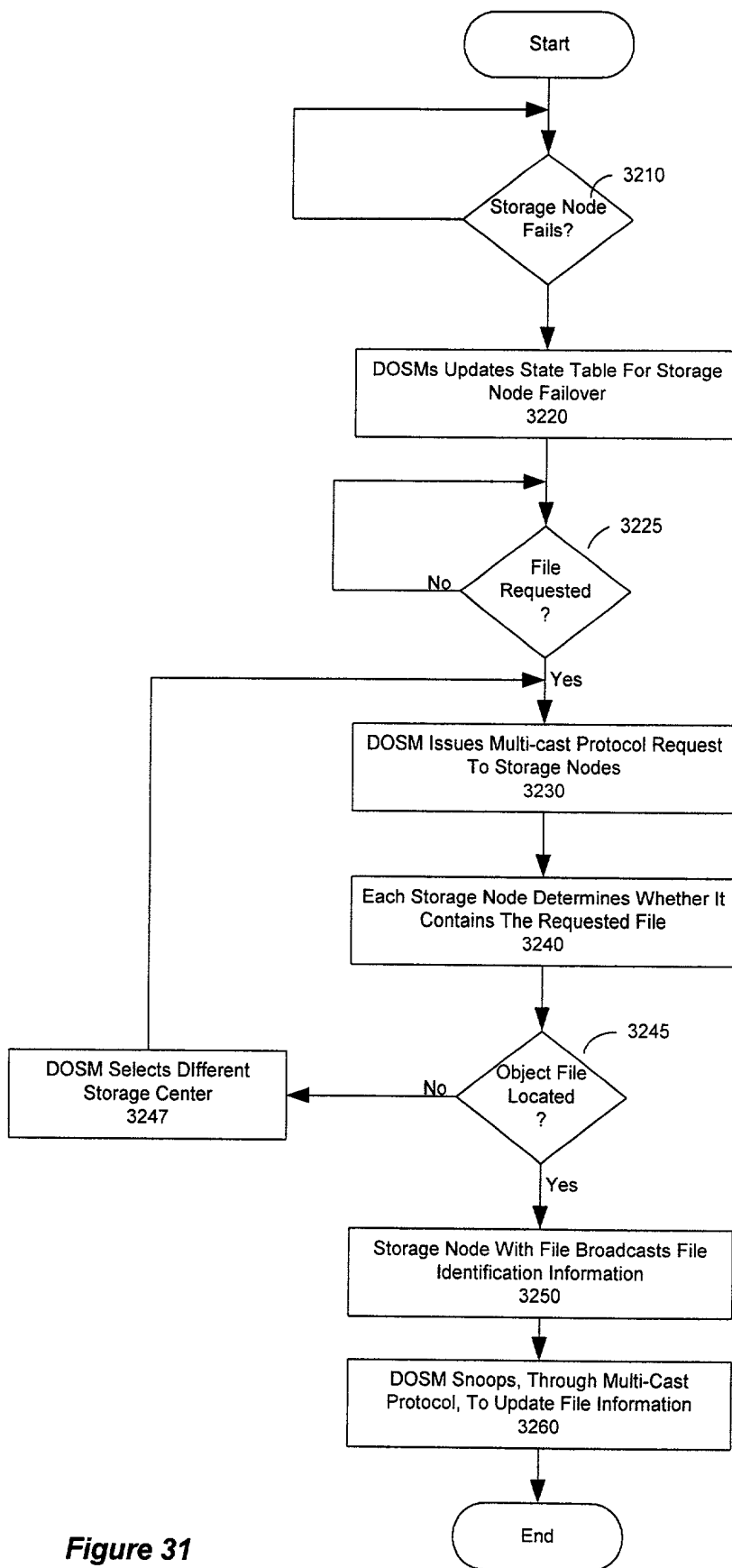


Figure 31